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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,927	12/22/2001	Celine Yonghong Wang	100.271US01	9877
34206	7590	09/27/2005	EXAMINER	
FOGG AND ASSOCIATES, LLC P.O. BOX 581339 MINNEAPOLIS, MN 55458-1339			ELALLAM, AHMED	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,927

Applicant(s)

WANG ET AL.

Examiner

AHMED ELALLAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/21/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In paragraph [08], line 5, Examiner believes that the phrase "information on a permanent virtual connection" should be changed to "information for a permanent virtual connection".

Appropriate correction is required.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

In claim 5, line 7, Examiner believes that the phrase "information on a permanent virtual connection" should be "information for a permanent virtual connection".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2-4, 8, 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, the specification does not adequately describe the claimed “establishing a permanent virtual circuit between the switch and the remote node based on the embedded information”. More specifically, the specification doesn’t describe how the PVC is established. For example the it is recited in the specification that:

At block 204, the process embeds information on a permanent virtual connection between switch 108 and remote node 106 into a packet, e.g., an ATM cell for transmission over network 102. In one embodiment, the information that is embedded in the data packet is embedded in the destination address and includes slot, port, VPI and VCI information for the permanent virtual connection. At block 206, the process transmits the packet with embedded information over a switched virtual circuit through network 102. In one embodiment, this packet is sent over a static connection under the IISP protocol. At block 208, the process sets up the permanent virtual circuit between switch 108 and remote node 106 based on the embedded information. The method ends at block 210.

From the above statement, it is not clear how the process “sets up the permanent virtual circuit between switch 108 and remote node 106 based on the embedded information”.

Claims 2-4, 8 and 9 depends from claim 1, thus they are subject to the same rejections.

Regarding claim 10, the specification does not adequately describe the claimed “establishing a permanent virtual circuit between the switch and the remote node based on the at least slot, port, VPI and VCI information to complete the end-to-end connection”. The specification doesn’t describe how the PVC is established based on the embedded information for similar reasons as indicated above with reference to claim 1.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-4, 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, 3, 4, 8, 9, the claimed "the destination address" lacks antecedent basis.

In claims 4, it is not clear what is meant by the claimed "embedding slot, port, virtual path identifier (VPI), virtual channel identifier for the permanent virtual circuit between..." More specifically it is not clear what slot and port is referred to.

Claim 10 suffers from the same deficiencies as indicated in claim 10. Thus it is subject to the same rejection.

In claim 3 and 8, it is not clear what port is referred to.

In claim 9, and 10, it is not clear what port and slot is referred to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art in view of Bosloy et al; US006714544B1. Hereinafter referred to as APA and Bosloy respectively.

Regarding claim 1, the APA disclose a method for establishing an end-to-end virtual circuit in a data network comprising:

Established soft permanent virtual circuit between customer premises equipment (CP) over a network with an ISP (claimed remote node) that is connected to another switch (claimed switch) in the network, wherein the established connection comprises:

A permanent virtual connection between the CP equipment and a DSALM over a telephone line, see [05];

A static connection between DSLAM and the switch connected to the ISP, see paragraph [06];

A permanent virtual connection between the switch and the ISP, see paragraph [05];

(Examiner interpreted the established connection of prior art of being preceded by corresponding establishing steps, because that is required for the connection setup).

The prior art doesn't specify embedding information for the permanent virtual connection between the switch and the ISP in a packet transmitted over the static connection in a network for the establishment of a permanent virtual circuit between the switch and the ISP.

However, Bosloy discloses a command having embedded information for establishing a permanent virtual connection. See column 5, lines 40-55. (The command having the information is interpreted as being the claimed packet having embedded information because the command is an ATM packet).

It would have been obvious to a person of ordinary person in the art to send a command for establishing the permanent virtual circuit as taught by Bosloy in the system of APA for establishing the APA connection between the switch and the ISP from the source endpoint (CP) to the destination endpoint (ISP) so that end-to-to-end permanent virtual connection of APA can be realized between the switch and the ISP using command signaling content. The motivation would be the recognition of using available methods in establishing end-to-end virtual connections in the system of prior art.

Regarding claim 2, Bosloy discloses that the embedded information comprises VCI/VCI information, see column 5, lines 45-48). (Claimed embedding information comprises embedding information in the destination address, Examiner interpreted the VPI, VCI to be in the destination address of ATM command packet, as dictated by the established ATM standard).

Regarding claims 3 and 4, Bosloy discloses that the embedded information comprises slot, port, virtual path identifier (VPI) and virtual channel identifier (VPI) for a permanent virtual circuit. See column 5, lines 40-48.

Regarding claims 5 and 10, the APA discloses conventional DSLAM located at a central office of a telephone company, the DSLAM includes: a number of different

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cards, at least one line card that provides connection to the data network over one or more high capacity lines, a number of channel cards that provide connection to a number of modems over a number of telephone lines, see paragraph [04]. APA further discloses having established soft permanent virtual circuit between customer premises (CP) over the network with an ISP (claimed remote node) that is connected to another switch (claimed switch) in the network, wherein the established connection comprises:

A permanent virtual connection between the CP equipment and a DSALM over a telephone line, see [05];

A static connection between DSLAM and the switch connected to the ISP, see paragraph [06]; (claimed static connection in the data network between at least one line card and the switch);

A permanent virtual connection between the switch and the ISP, see paragraph [05];

(Examiner interpreted that corresponding establishing steps precede the established connection of prior art, because that is required for the connection to be established).

The prior art doesn't specify information "for" the permanent virtual connection between the switch and the ISP is embedded in a packet transmitted over the static connection between a line card and the switch, as in claim 5 and establishing the permanent virtual circuit between the switch and the ISP based on at least slot, port, VPI and VCI information to complete the end-to-end connection as in claim 10.

However, Bosloy discloses a command having embedded information for establishing permanent virtual connection. See column 5, lines 40-55. (The command

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having the embedded information is interpreted as being the claimed packet having embedded information because the command is an ATM packet). It would have been obvious to a person of ordinary person in the art to reverse the sending of command signaling for establishing the permanent virtual circuit of that taught by Bosloy in the system of APA for establishing the APA connection between the switch and the ISP so that end-to-to-end permanent virtual connection of APA can be realized between the switch and the ISP using command signaling content. The motivation would be the recognition of using available methods in establishing end-to-end virtual connections in the APA system.

Regarding claim 6, APA discloses a channel card that support ADSL, see paragraphs [02] and [04].

Regarding claim 7, Examiner interpreted the command having the embedded information of being the claimed packet having embedded information in the destination address of the packet, because the command is an ATM packet, and information usually (VPI/, VCI, port etc...) is inserted in the destination address portion of the ATM packet by standard (ATM Forum).

Regarding claims 8 and 9, Bosloy discloses that the embedded information comprises slot, port, virtual path identifier (VPI) and virtual channel identifier (VPI) for a permanent virtual circuit. See column 5, lines 40-48. (The command having the embedded information is interpreted as being the claimed packet having embedded information because the command is an ATM packet, the VPI/, VCI, port etc... are inserted in the destination address portion of the ATM packet by standard).

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Burns et al, US006292463B1; Philips et al, US006542266B1; Rajakarunayake, US006587883B1; Chiu et al, US006597689B1; Wang et al, US006636505B1; Burns et al, US006665295B1; and Tang, US006873628B1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
September 23, 2005


JOHN PEZZLO
PRIMARY EXAMINER